

S.N. 10/615,533
Guy Lichtenwalter et al.
Atty Dkt 10960809-5

AMENDMENTS TO THE CLAIMS

Claims 1-4 (canceled)

5. (currently amended) An apparatus comprising:

a printed circuit board;

a U-shaped metalized pad deposited on a surface of the printed circuit board; [and]

a solder mound contacting the U-shaped metalized pad, the solder mound having a U-shaped lateral cross section conforming to the U-shaped metalized pad;

said solder mound comprising a lateral bridge portion and first and second arm extremities extending in a longitudinal direction away from the bridge portion along the surface of the printed circuit board;

each of said first and second arm extremities having a first portion proximate said bridge portion and an oppositely-disposed second portion proximate a terminal end of said arm extremities; and

a means [coupled with the U-shaped metalized pad] for registering an extremity of a component lead with respect to the pad, said means comprising a tapered aperture formed between said first and second arm extremity second portions.

6. (currently amended) An apparatus comprising:

a printed circuit board;

a U-shaped metalized pad deposited on a surface of the printed circuit board;

a solder mound contacting the U-shaped metalized pad, the solder mound having a U-shaped lateral cross section conforming to the U-shaped metalized pad;

S:N. 10/615,533
Guy Lichtenwalter et al.
Atty Dkt 10860809-5

said solder mound comprising a lateral bridge portion and first and second arm extremities extending in a longitudinal direction away from the bridge portion along the surface of the printed circuit board;

each of said first and second arm extremities having a first portion proximate said bridge portion and an oppositely-disposed second portion proximate a terminal end of said arm extremities; and

a tapered aperture formed between said first and second arm extremity second portions.

7. (currently amended) An apparatus as in claim 6 wherein [the solder mound includes a first arm for] said tapered aperture is capable of registering a component lead with respect to the pad in a lateral dimension perpendicular to said first and second arm extremities [the arms of the solder mound].

Claims 8-10 (canceled)

11. (currently amended) An apparatus as in claim 6 wherein said first arm extremity has a [the U-shaped metalized pad has a first arm having a respective] width dimension within a range of approximately three thousandths of an inch to approximately fifteen thousandths of an inch.

12. (canceled)

13. (currently amended) An apparatus as in claim [8 wherein the lateral aperture of the solder mound] 6 wherein said tapered aperture has a width dimension within a range of approximately five thousandths of an inch to approximately twenty thousandths of an inch.

14. (currently amended) An apparatus as in claim 6 wherein [the U-shaped metalized pad has a first arm having] said first arm extremity has a

S.N. 10/615,533
Guy Lichtenwalter et al.
Atty Dkt 10960809-5

respective length dimension, measured in said longitudinal direction, within a range of approximately twenty thousandths of an inch to approximately twenty thousandths of an inch.

Claims 15 and 16 (canceled)

17. (original) An apparatus as in claim 6 further comprising:
an array of U-shaped metalized pads deposited on a surface of the printed circuit board;

a plurality of solder mounds each contacting a respective one of the U-shaped metalized pads, the solder mounds each having a respective U-shaped lateral cross section conforming to the respective U-shaped metalized pad, each solder mound including a respective first arm and second arm, a respective lateral aperture extending between the arms of each solder mound for receiving an extremity of a respective component lead; and

a respective bridge portion extending between the arms of each solder mound.

18. (currently amended) An apparatus as in claim [10] 17 wherein each U-shaped metalized pad of the array is similarly oriented.

19. (currently amended) An apparatus as in claim [10] 17 wherein the array of U-shaped metalized pads are arranged in a row.

20. (currently amended) An apparatus as in claim [10] 17 wherein the pads are arranged in a spaced apart relation with a range of thirty thousandths of an inch to one hundred thousandths of an inch.

21. (new) An apparatus as in claim 5 and further wherein:

S.N. 10/615,533
Guy Lichtenwalter et al.
Atty Dkt 10960809-5

each of said first and second arm extremity second portions is tapered in the longitudinal direction away from said bridge portion along the surface of said printed circuit board, thus forming a first taper on said first arm extremity and a second taper on said second arm extremity; and
said tapered aperture comprises said first and second tapers.

22. (new) An apparatus as in claim 6 and further wherein:

each of said first and second arm extremity second portions is tapered in the longitudinal direction away from said bridge portion along the surface of said printed circuit board, thus forming a first taper on said first arm extremity and a second taper on said second arm extremity; and
said tapered aperture comprises said first and second tapers.

23. (new) An apparatus as in claim 6 wherein the solder mound has a height dimension within a range of five thousandths of an inch to twenty thousands of an inch.